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Court Technology

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INTRODUCTION

There were those who said that the automobile would never replace the horse and that the computer would never replace the Royal typewriter. Few, however, disagree that technology today is changing how judges and clerks perform their jobs. Municipal judges and clerks should be prepared to make specific recommendations on the use of this technology in their courts.

Some equate working in the Digital Age to driving a car. It is not necessary to know how to build a car to drive it safely from place to place. The same argument can be made for operating a computer and using modern technological advances. This study guide is meant to provide clerks with sufficient information to make informed decisions about which technological advances to implement and what equipment is required to do this. These days, making informed decisions about the use of technology also requires an understanding of ethical and legal dilemmas that can arise through the use of social media and other technologies.

Since all courts already use telephones, copiers, and fax machines, they will not be discussed in this guide. Today, a computer with court management software, data processing, e-mail, spreadsheet capabilities, and a high speed internet connection is essential as well. The use of a video recorder is also highly recommended.

PART 1
COMPUTER COMPONENTS AND MINIMAL REQUIREMENTS

This study guide begins with an overview of personal computers. If a court is large enough for the use of a server, it is suggested that a computer specialist be contacted to assist with the purchase and implementation of the necessary equipment and software.

A. Hardware

Hardware refers to the physical, electronic, and mechanical equipment that makes up a computer.

1. Type of Computer

Generally, personal computers (PCs), rather than Apple computers, are used in court environments. Thus, only PCs are discussed in this study guide. In addition, mobile devices, such as the iPad and Android tablets, are briefly discussed.

2. Hard Drive

The hard drive refers to the fixed disk within the computer that stores information for permanent or long-term use. A new system purchased for a low volume court should have at least 250 gigabytes (GB) as the size of the hard drive. If a computer needs to store high volumes of data or digital files, a larger hard drive or external hard drive may be needed.

3. Processor

The processor, or central processing unit (CPU), is often referred to as the “brain” of the computer because it reads and executes the commands that the user issues. Processors are defined by speed. The greater the processing speed, the more instructions or tasks the computer can perform per second. The majority of computers purchased include either an Intel or AMD processor. Today, Intel chips range from a speed of 2.0 GHz (gigahertz) and up on single-core, and 2.0 to 3.8 GHz on multi-core CPUs. The more cores a CPU has, the more processing power (i.e., 2.0 GHz x 2 cores is more powerful than 3.4 GHz x 1 core). A minimum speed of 2.0 GHz

is recommended, but check the market before purchasing because speeds are increasing every day. A computer with at least a dual core processor is recommended.

4. Memory or Random Access Memory (RAM)

Not to be confused with disk storage space (read only memory−ROM), random access memory (RAM) is a memory device in the form of a computer chip or inline memory module that stores information for processing. This high-speed memory holds a copy of the operating system, any current applications being used, and all information that is being processed while the system is in use. The file that is being modified and all changes that are made are kept in RAM until it is "saved."

Most new computers are loaded with at least 2 GBs (gigabytes) of RAM but some have much more. The industry is constantly changing, but as memory is easily upgraded, purchase what the court can reasonably afford.

5. External Storage Devices

External storage devices allow for portable data storage. Choosing the right external storage device will require some research, as there are many different types, sizes, price ranges, and available connectors. Two common external storage devices are external hard drives and USB flash drives.

External hard drives are available. External hard drives are useful if the court needs to store massive amounts of data that the user may need to access occasionally or that may need to be portable. External hard drives store data in the same fashion as an internal one, but with an external hard drive, the drive is connected to the computer via a connection, generally a USB port, so that it may easily be removed and stored anywhere, including off-site. External hard drives are a good choice for doing computer/server back-ups. Storage is defined by gigabytes (GB) or terabytes (1000 GBs) and varying sizes of external hard drives are available.

If the court needs a storage device that is even more portable for frequent use, USB memory sticks−also called flash drives−are available. As indicated in the name, these devices connect to the computer through a USB port (most new computers have two or more USB ports and USB hubs are available for additional connections). Memory sticks are for storing data that needs to be transferred from one location or computer to another. Unlike external hard drives which require certain drivers to be present on a computer, memory sticks will work on any computer that is operating at Windows 2000 or newer. Memory sticks vary in price according to storage size and manufacturer.

6. Data Disks

Data disk is an all-inclusive term used to refer to CD, DVD, or Blu-ray media, which is used to store digital data. Data disks are different from the audio and video disks in that a data CD cannot be played on a home stereo, even if audio files are on the disc. Data disks are yet another way to store court data, such as computer/server back-ups.

a. CD-ROM

CD stands for compact disc and is a read only memory bank (resulting in the common usage of CD-ROM). CD-ROM drives provide a low cost way to read data files. A CD-ROM drive has become necessary because most software is only available in the CD-ROM version. National

legal publishers offer state and federal codebooks and case law on CDs because they are easy to access, easy to replace, and take up less space.

b. CD-R/CD-RW

A CD-R is recordable CD-ROM technology. In order to create a CD-R, it is necessary to have a CD-R drive, commonly called a "burner." A writeable CD usually stores 700 MB of information when written or burned onto a CD. A CD-R drive is also a regular CD-ROM reader.

CD-R technology only allows data to be written once. CD-RW is rewritable CD-ROM technology that allows data to be written, erased, and re-written. In order to use the rewriting technology, a CD-RW drive and disc are required. CD-RW drives can also write CD-R discs and read CD-ROM technology.

c. DVD-ROM

DVD-ROM drives allow for viewing of data stored on DVD discs. Most standard CD-RW drives are also DVD-ROM drives.

d. DVD Recorders

DVD technology is most commonly used to store movies and pictures, however, DVD burning technology also allows for data storage. A single-layer DVD-R can store 4.7 GB of data (almost 6 CDs) and dual layer DVD-R can store over 9 GBs of data. For storage of large amounts of data, it is a cost efficient option. In order to write or burn digital data to a DVD, a DVD recorder is necessary.

Choosing a DVD recorder is different from choosing a CD-RW because there are different manufacturers, media, and recorders from which to select and not all manufacturers or recorders will read discs created from another DVD recorder.

In general, a DVD+R allows for a DVD disc to be written, recorded, or burned and most DVD players will then read that disc. If the DVD+R manufacturer and the DVD player that will play that disc are the same, the likelihood of compatibility increases. There are many other types of recorders to consider, including: DVD+RW, DVD-R, DVD-RAM, and DVD-RW.

Storage Device	External Storage Device	CD-R	CD-RW	DVD-ROM
Price	Varies	$.20 each*	$.52 each*	$.90 each*
Storage	Varies	~700 MB	~700 MB	~ 4.7 GB
Size	Varies (small flash drive to large, heavy box)	Disc-size	Disc-size	Disc-size
Rewritable?	Yes	No	Yes	Depends
Connection	USB	CD drive required	CD-RW drive required	DVD-ROM drive required

*All prices are approximations and estimates based on popular online shopping websites.

7. Monitor

The monitor is the primary link between the computer and the user's eyes. Presently, there are two standard types of monitors from which to choose, Cathode Ray Tube (CRT) and Liquid Crystal Display (LCD).

Traditionally, a CRT monitor was the standard monitor and has the same technology used in older televisions. In CRT monitors, it is important to consider dot pitch; a small dot pitch means sharper images. CRT monitors come in varying sizes (the amount of screen in which data is displayed) and colors. CRTs are heavy and increasingly more difficult to find.

LCD monitors are lightweight, energy-efficient displays most commonly seen in laptop computers and flat screen monitors. In LCD monitors, it is important to consider contrast ratio (a higher contrast ratio results in more vivid images), pixel pitch (a smaller pixel means sharper images), response time (faster response time prevents "ghosting" as an image is moved), and viewing angle. LCDs have become increasingly cost effective and they save space.

For monitors, be aware of the optimal resolution (higher resolutions allow for more information on the screen) and scan refresh rates (higher refresh rates can help reduce the dimming that causes monitor flickering).

In deciding what type of monitor most meets the needs of the court, consider the following: amount of time per day the monitor is used, the desk space available, and the data the monitor displays. Data entry clerks may need a higher quality monitor that will decrease eye strain and fatigue, whereas a clerk who works in the open common area may require a smaller flat panel LCD monitor. The new trend is to have dual monitors to facilitate workload.

8. Mouse and Keyboard

To use a Windows program, a mouse or pointing device is needed. Pointing devices vary from the traditional mouse attached to the serial port or USB port, to trackballs, touchpads, and pointing sticks. The use of ergonomic keyboards and mouse pads can help avoid hand and wrist strain.

9. Printer

A laser printer is essential in most courts for speed and clarity of printed characters. The print speed should be no less than 20 pages a minute for a black and white laser printer; many will do 60 pages per minute. If the court is networked, a networked printer will allow high-speed printing from any computer terminal in the court.

10. Internet Connection

Courts have many options for connecting to the internet. The most common connections for courts are dial-up, DSL, cable, and fiber optic. Wireless broadband connections, such as satellite and cellular, are becoming increasing popular as well. Speed is the rate at which data is converted and transferred to a computer and is measured in bits per second (bps). The greater the bps, the faster the data transfer. See the chart on the next page for transfer rates.

The least expensive option is through a dial-up modem, also known as an analog line. In order to access the internet, a dial-up modem is required. For ordinary telephone lines, the highest speed at this time is 56.6 Kbps (kilobits per second). This is insufficient for the media driven and interactive content on the web.

Digital Subscriber Line, DSL, is high-speed internet access over ordinary telephone lines. There are different kinds of DSL available, such as ADSL and SDSL, which provide different speeds. The most significant factor in determining availability of DSL is the distance from the court to the telephone company. In general, to access DSL, courts must be within 3.5 miles of a "station."

Cable connections are an always-on, high-speed internet connection. In order to use a cable connection, a cable modem is required. Cable modems use the high-bandwidth capabilities of cable TV lines. It is shared media, which means that as more people in the area are in the cable line, the speeds for each user will decrease.

T-1 lines are another high-speed, direct internet connection. T-1 lines are fast because the foundation is a dedicated telephone line that transfers data through 24 individual channels. Unlike cable, this connection is not shared, which can translate to more stable speeds. Most telephone companies allow users to buy only some of the channels at reduced rates; this is called fractional T-1 access.

Fiber optic is currently only available in a few places, but is rapidly growing in popularity and prominence. The speeds available with fiber optic are much faster than with standard internet connections like cable or DSL.

Wireless broadband connections, including cellular, satellite, and WiMAX, are becoming increasingly popular as well. There are a variety of wireless signal spectrums, referred to as 3G, 4G, LTE, etc., which offer different speeds. The availability and speed of these signals varies wildly depending on your location, but as companies expand their infrastructure, their reliability and popularity will only continue to grow.

Service	Dial-up	Cable	DSL	T-1	Fiber Optic	Wireless
Availability	Everywhere	Mostly residential areas	Metro areas and suburbs	Metro areas	Limited metro areas	Metro areas
Choice of provider	Any ISP	Local cable provider	Select ISPs	Select ISPs or phone companies	Select ISPs	ISPs and cellular providers
Downstream speed to computer	Up to 56 Kbps	800 Kbps to 27 Mbps	Up to 8 Mbps	Up to 64 Kbps	Up to 1 Gbps	Up to 28 Mpbs
Upstream speed to computer	33.6 Kbps	33.5 Kbps to 5 Mbps	Up to 1.1 Mbps	Up to 64 Kbps	Up to 1 Gbps	Up to 22 Mbps

11. Network Server

If the court has more than one computer, it is recommended that the computers be connected via a LAN (local area network) so that software and data can be shared and an office e-mail communications system can be established. Users will be able to share files, as well as printers. A host computer, cables, and networking server software (Windows NT Server or Windows 20** Server) are also required. If the court is in an old building where it is not practical to run wires through the ceilings or walls, the court may want to look into wireless LANs or wireless Small Business Server networking.

B. Software

Software refers to the programs used by the computer. On mobile devices, software is often referred to as “apps.”

1. Operating System Software

Operating system software controls how the computer works and includes programs such as Windows and Linux. This software creates program and data files and controls the flow of information between the processor, memory, and the devices. Most new computers are automatically loaded with an operating system that may be upgraded.

2. Word-Processing

Although there are alternatives, most courts and law firms use Microsoft Word or Corel WordPerfect. Some software programs may be purchased as packages. For example, Microsoft Office Professional offers Word, Excel, PowerPoint, Access, and Outlook. These packages include compatible word-processing, spreadsheet, and presentation software that can be installed at the same time.

At a minimum, the word processing package should include a spell checker and have the capability to move text easily, merge functions, and footnote, as well as the ability to create an index, an outline, and a table of contents.

3. Spreadsheet Program

These programs can be used to analyze case statistical records, dispositions, or sentencing patterns and to assist with accounting. A spreadsheet also allows you to present information graphically with pie charts, graphs, and other demonstrative aids. Microsoft Excel is now the industry standard.

4. Web Browser

A web browser is an application program that serves as a tool for searching information on a computer network, such as the World Wide Web. Common browsers include Microsoft Internet Explorer, Mozilla Firefox, Google Chrome, and Safari (used primarily with Apple products).

5. Fax Software

A full-featured fax software program allows you to fax directly from your personal computer through a fax modem. An address book and a personal information manager are features made available with some software. In order to fax from a computer, either a modem and analog telephone line, a connection into a network with an Internet fax machine, or a centralized fax modem is needed. Many copiers now come equipped with fax components requiring a category 5 network connection to utilize the network.

6. Utility Software

Common utility software includes computer file management and data backup applications, lost data restorers, and file compressors. Norton Utilities (Symantec) and McAfee Utilities are common options.

With the influx of viruses on computers that connect to the internet, it is vital that a computer have updated antivirus software. Both Symantec and McAfee have antivirus software that can easily be updated by either visiting their website or allowing the software to automatically update. Many antivirus software packages also contain tools for fighting spam or junk e-mails.

Antivirus software packages also contain adware and spyware blockers and removers. Adware and spyware are small computer programs that are downloaded on a computer, without the user's

knowledge, for the purpose of collecting data on the computer usage. Some adware goes as far as installing advertising software that creates pop-up windows each time a computer is connected to the Internet. If the antivirus software the court uses does not get rid of adware or spyware, visit CNet, AVIRA, or AVG for free and low cost options.

Q. 1. What is the name of the fixed piece of hardware that stores information permanently or for long term use? _____

Q. 2. What is the difference between the hard drive and the processor? _____

_____

Q. 3. What does RAM stand for and what is it used for? _____

_____

Q. 4. Why is a CD-ROM drive useful for legal research? _____

_____

Q. 5. What is the difference between the hardware and software in computers? _____

_____

Q. 6. What is the "software" equivalent on a mobile device? _____

Q. 7. What purpose does utility software serve? _____

_____

PART 2
THE INTERNET AND ITS FEATURES

The internet is a worldwide computer network of individuals and organizations linked by computers that contains a wealth of information.

The following are examples of ways municipal court employees can use the internet:

- to locate defendants' addresses or telephone numbers on paid or free locator websites;
- to monitor legislation on the Texas Legislature Online website;
- to access Texas statutes also on the Texas Legislature Online website;
- to download defendants' driving records from the Department of Public Safety website;
- to participate in OmniBase Failure to Appear program;
- to search and read Attorney General opinions on the Texas Attorney General's website; and
- to participate in online educational programs offered by TMCEC and other judicial education providers.

The metaphor of a super-highway is used to represent the internet because it consists of millions of computers around the globe connected by wires, fiber optics, and satellites. Like cars on a highway, bits of information move from place to place and there are many routes to a destination. The user, for example, can access Attorney General Opinions from the Attorney General's website: www.oag.state.tx.us; can access tax forms on the State Comptroller's

website: www.window.state.tx.us; or access numerous association or agency websites via links on the TMCEC website: www.tmcec.com.

A. World Wide Web

The World Wide Web, more commonly known as the Web, unites the informational resources of educational institutions, public and private organizations, businesses, and individuals from around the world. The World Wide Web is basically a huge mass of documents located at various sites around the world. There are no political or geographic boundaries. Most people use web browser software to navigate the internet (like Microsoft Internet Explorer or Mozilla Firefox).

A website is a place where individuals or groups can publish their own home pages. Each page has a unique address, in the form of a Universal Resource Locator (URL). A specific home page can be located by entering its URL or clicking a hypertext link, indicated by a different color of text or some other obvious means such as underlining, to connect to that page. A URL looks like this: http://www.tmcec.com.

B. Mailservers

Mailservers store and forward electronic mail (email). If email is accessed through an internet service provider, the service provider houses the mailserver.

C. Listservs

Listservs work like a mailing list of people who are interested in the same topics. One person can correspond with many people at once. Every message posted to the list is sent to all of the list subscribers by email. Mailing lists are different from newsgroups in that all messages are received automatically instead of the user signing into a site to read and post messages. Most listservs are open, some are by invitation only, and some have moderators. TMCEC houses listservs for prosecutors, judges, court interpreters, bailiffs and warrant officers, and court administrators as well as one on traffic safety. To join a listserv, visit the TMCEC website for details.

D. Chat Sites

Chat sites allow a user to "talk" in real-time. Whereas a written message is sent to a newsgroup to be read later, in a chat session, a message is typed and other users in the virtual chat session can read it and respond to it immediately.

Q. 8. Explain why the metaphor of the internet as a superhighway is so frequently used. _____

_____

PART 3
USING THE INTERNET

A. Getting Online

1. Equipment

To use the internet, one connects a home or office computer by one of the connection methods listed in the chart located in Part 1 of this study guide. Depending on the type of internet access available, extra equipment, such as a modem, may be needed.

2. Web Browsers

Web browsers used to access the internet are usually pre-loaded on computers or bundled with software packages, such as Microsoft Internet Explorer, which is bundled with all of the Microsoft packages. Once properly set up, using the internet or "surfing the web" is simple and fun.

3. Internet Service Providers

A number of private companies offer internet connections at varying ranges of prices. A connection typically costs $10 to $50 a month, depending on speed, and includes an e-mail account and unlimited access to the internet. The user must determine what his/her internet needs are and the amount of the monthly or yearly payments they are able to pay.

National internet service providers have local access telephone numbers and 800 numbers to save the users from paying on long distance telephone charges. Many include home pages that help the user find the Internet sites that are of interest and offer hot links and new site information. Others offer website storage or hosting for the user. These providers also offer free software and technical assistance. A disadvantage to using these large companies is that their telephone lines are often busy.

If your court does not need the extra services offered by an internet service, it may be preferable to pay an internet service provider (ISP) for internet access only. For a lower rate, many ISPs offer only the connection to the internet and do not include e-mail accounts. Check the local telephone book for providers that offer telephone and onsite technical assistance.

B. Understanding Internet Addresses

The domain name server (DNS) is the system that allows web address URLs−a set of letters or words that represent numbers that can digitally access websites−to be words instead of numbers. A web address is actually a series of numbers and dots called an IP address, for example: 123.45.6.78. Instead of remembering those numbers, a user can type in words, like www.tmcec.com, commonly referred to as a domain name. The DNS system would match those words to the correct IP address and take the user to the website.

A domain name always has two or more parts separated by a period and typically consists of some form of an organization's name and a three or more letter suffix. For example, the domain name for the National Center for State Courts is "ncsc.org." Where "ncsc" represents the organization and ".org" indicates the type of organization. The three or more letter suffix is called a domain extension. Below are some examples of common domain extensions:

Common Domains	
Name	**Description**
.com	Commercial companies
.edu	Educational institutions
.gov	Government
.net	Network organizations
.org	Non-profit organizations
.mil	Military

The Judicial Committee on Information Technology (JCIT), which operates under the direction and supervision of the Chief Justice of the Texas Supreme Court, has issued a domain naming standard that suggests that municipal courts use the following format when defining their domain name: www.(courtname).ci.(cityname).tx.us. Although this is not required, it is preferred. However, many cities are moving to a .gov extension.

C. Linking to Web Pages

To link to a web page, a user can enter an internet address (URL) into the title or address bar of a web browser. When the user clicks "Go" or hits either the enter or return button on the keyboard, the web browser travels on the computer network, locates that address, and displays it on the screen. While there are other ways to navigate the internet, a web browser is the simplest, and it is the only one discussed in this guide. Shown below is a typical web page using the URL addressing system.

URL
Hypertext
City of San Antonio | Official Web Site - Municipal Court - Windows Internet Explorer
http://www.sanantonio.gov/court/
sa.Gov Home
Business
City Services
Departments
Government
Recreation
Residents
Visitors
CITY OF SAN ANTONIO
OFFICIAL WEBSITE
MUNICIPAL COURT
SAN ANTONIO
SAMC Home ....
About The Court ....
Court Procedures ....
Dismissals ....
Juror Information ....
Payment Options ....
Fine Amounts ....
Parking Enforcement ....
City Marshal/Warrants ....
Court Programs ....
Useful Links
Contact the Court
San Antonio Municipal Court (SAMC)
Traffic Tickets
Different ways to settle your Traffic Ticket
1. *NEW* Valley View Link Center (located in North San Antonio): A San Antonio Municipal
2. Video Court Conferencing: Got a ticket and want to save money and time? Visit The Oak Ridge Community Link Service Center to use video conferencing to settle your ticket.
3. Settle your Ticket online: Once approved by the San Antonio Municipal Court Judge and you meet the eligible requirements, you may be able to prevent your traffic ticket from appearing on your state driving record by means of Deferred Disposition (sometimes referred to as Probation), or a Drivin
4. Municipal Court Online Payment System: If you do not qualify to resolve your ticket online vi

A website usually contains both regular text for reading and underlined or specially colored text called "hypertext" or a "hyperlink." Hypertext is the system used to cross-link or anchor documents by highlighted words or symbols. On a website, if a word is underlined or colored differently than the surrounding text, it usually means that it has been linked to another page. By clicking the mouse pointer on the hypertext, the computer finds the underlying anchor, which may be down the page or on another page in the same or even on a different website.

D. Locating Information on the Internet

The internet provides access to unlimited amounts of information. Finding the information needed is easy if one understands the essential search elements of the internet.

To locate information on the internet, it is necessary to use a website with a search engine. A search engine is a program that searches web pages for specified keywords and returns a list of

the web pages where the keywords are found. A search engine works by sending out a "spider" to locate all the documents on the web and indexes them for easy, quick access for users. Although the term "search engine" is a type of software, the term is often used to specifically describe websites like Yahoo and Google that enable users to search the web.

To locate information on the internet, a user should go to one of the websites that contains a search engine. The most popular sites include Yahoo and Google, but, there are hundreds of sites with search engines. The key is to find one that is user friendly and produces specific results. In order to access the information a user needs quickly, it is important to be very specific. For example, if a user needed to find the website of the Office of Court Administration, just typing in "Office of Court Administration" would result in websites not relevant to Texas. Instead, typing "*Texas* Office of Court Administration" would yield results that are more specific. In addition, most search engines ignore common words like "the" or "of," so it is not usually necessary to type them. Nevertheless, in the above OCA example "of" is part of the title. If the search engine should include the common word, put quotation marks around the phrase or title to be searched. This lets the search engine know that the results should include websites where those words are together in that order.

E. Using Email

Email (short for electronic mail), is a very effective means of communication. Email allows a user to electronically send and receive letters, files, pictures, videos, sounds, and more. In order to use email, a computer must have an internet connection. Many users prefer to access their email through a software package. Microsoft Office users, for example, can use Outlook to manage their emails. If a user is accessing his or her email through an Internet Service Provider, such as AOL, the ISP provides software. Free email is offered through various websites on the internet (mail.yahoo.com and mail.google.com), but the user must have a way to connect to the internet to use these email servers.

The JCIT has issued an email standard that suggests that municipal courts use the following format when defining their email addresses: (username)@(courtname).ci.(cityname).tx.us. Again, many courts and cities are moving to a .gov extension.

Although email is an efficient means of communication, in order to manage it, additional software packages may be necessary. For sending and receiving files via email, a file compression utility such as WinZip will reduce the file in size and will allow for faster transmission (visit www.cnet.com for a trial version). To keep the computer network secure, the installation of firewall security software is recommended. In addition, an antivirus protection program will help to protect the computer.

F. "Netiquette" & "Netspeak"

When communicating with others on the internet, it is important to give others the same respect that you would in face-to-face communication. Some guidelines for cyberspace etiquette (netiquette) are:

- Assume publicity as email is easily forwarded.
- "Flame wars" or verbal warfare and heated messages should be avoided.
- Others' time and energy should be respected and internet use should be kept short.

- Keep in mind that things that may seem funny in person can seem rude or sarcastic in print.
- Chain letters should not be forwarded in the professional environment.
- Be careful when opening mail from unknown persons, as it may contain viruses or solicitations.

G. Privacy & Security Issues

Generally, there are no assurances of privacy on the internet. Privacy should not be expected in using email, chat rooms, newsgroups, or listservs. Remember that email can easily be forwarded or intercepted. Many government employees and legal practitioners include a confidentiality notice on outgoing email messages. An example of such a notice is:

> This email communication may contain private, confidential, or legally privileged information intended for the sole use of the designated and/or duly authorized recipients. If you are not the intended recipient or have received this email in error, please notify the sender immediately by email or contact (xxx) xxx-xxxx and permanently delete all copies of this email, including all attachment without reading them. If you are the intended recipient, secure the contents in a manner that conforms to all applicable state and /or federal requirements related to privacy and confidentiality of such information.

Keep in mind, however, that this is just a notice. It may serve as a deterrent, but the email is still out there. Also, emails may be subject to discovery or release pursuant to a records request. Furthermore, through the use of blind copy and forwarding, you never know who is receiving your email or a version of your email message.

A complicated system of highly secure dedicated telephone lines with independent servers and encryption is needed for those seeking secure communications. A "firewall" is recommended to protect databases from intrusion. A firewall is a type of software program or a piece of hardware that prevents unauthorized access to a computer network via an outside connection.

If privacy is a concern, encryption software is available. Encryption is the process of encoding information so that it remains confidential from all when sent on the internet except to the intended recipient. To encrypt a document, one applies an encryption algorithm (a mathematical formula used to transform a text string into an encoded message, or cipher text) and sends the encrypted message to the intended recipient. Someone who intercepts the encrypted text and does not have the key cannot, in theory, decode it.

It is common now for purchases or payments to be made on the internet using credit cards or electronic checks. There is much discussion about whether to give credit card numbers to vendors on the internet considering the risk of credit card fraud. Some credit card companies offer insurance against credit card fraud, while others argue that there is no greater risk of credit card fraud on the internet than when using a credit card to buy dinner at a restaurant.

Q. 9. What equipment, software, and service is needed to access the Internet? _____

_____

Q. 10. List one advantage and one disadvantage of using a large national Internet service provider?

_____

Q. 11. What is a URL? _____

Q. 12. Identify the following domains and indicate what they stand for:

.com _____

.edu _____

.org _____

.gov _____

Q. 13. What is hypertext? _____

_____

Q. 14. What is the URL of the TMCEC website? _____

Q. 15. List three guidelines for cyberspace etiquette. _____

_____

_____

Q. 16. How does a search engine work? _____

_____

Q. 17. Using the JCIT naming standard, what would your court's domain name be? _____

_____

True or False

Q. 18. Most e-mail systems can send messages as well as send and receive files. ____

Q. 19. What is a firewall? _____

_____

Q. 20. What is encryption? _____

_____

PART 4
COURT MANAGEMENT TECHNOLOGY

A. Advantages to Court Automation

Whether a personal computer system or a network is used, there are many advantages to automating court support systems.

1. Reduction of Repetitive Tasks

Multiple outputs can be obtained from a single input. For example, when a clerk enters the name of a party into an automated information system after a complaint is filed, that single entry can be used for many purposes, such as system-generated case lists, docket schedules, name indexing, and document generation. The single entry of a criminal case disposition can later produce weekly, monthly, and quarterly reports required by the DPS, OCA, and Comptroller.

2. Enhancement of Data Quality

Computers can track incomplete records. For instance, it is possible to generate a list of those who turn in driving safety course certificates before and after the deadline.

3. Increased Information Accessibility

Computers allow many persons to view the same information simultaneously. Information can be retrieved in seconds rather than waiting for a delivery from the file room.

4. Increased Organizational Integration

Computers allow information to be shared between divisions and departments. For example, cases can be shared between the clerk's office and the warrant officers for pursuing outstanding warrants.

5. Enhanced Statistics and Monitoring

Computers can quickly "number crunch" or count, sample, and analyze at many levels so that information is quickly generated for reports to the city manager or council, as well as for those reports required by the State.

6. Increased Effectiveness

Information stored in a computer can be used for many functions not practical in a manual environment. The court can generate reminder notices or monthly statements for installment accounts. The TMCEC *Forms Book*, for example, can be placed on the court's hard drive and adapted for court use without retyping every form. Also, messages can be emailed instantly to the judge on the bench to avoid interrupting court proceedings.

7. Electronic Reporting

Courts can expedite processes by electronically sending reports required by DPS, OCA, and the Comptroller. Visit the following websites for more information on electronic reporting.

- OCA – www.txcourts.gov/oca/required.asp
- Comptroller – www.window.state.tx.us

To contact DPS for electronic reporting, call 512.424.2031.

B. Types of Court Technology

1. Laptops

Considerable discussion has occurred at the state level concerning whether state funding should be used to provide a laptop for every judge. Each laptop might include a CD-ROM with state and federal laws, an internet connection to enable access to legal research, the *Bench Book* scripts, sample jury charges, court cost amounts, and information about specific cases before the bench. An imaging system would make possible a paperless process between the judge's bench and the clerk's records.

2. Mobile Devices

Mobile devices include smartphones, tablets, e-readers, PDAs, and a host of other devices, though over time the capabilities of these different devices have started to overlap. Generally, a mobile device can be defined as a handheld device weighing less than 2 pounds which allows the

user to access information and data from wherever they are. For the purposes of using a Mobile Device in a courtroom setting, tablets are the predominant device as they offer the optimal combination of mobility, computing power, and ease of use.

3. Video Hearings

When conducting video hearings (i.e, magistration hearings under Article 15.17; capias pro fine commitment hearings under Article 45.046; or probable cause determinations for arrest warrants under Article 15.03, all of the Code of Criminal Procedure), the judge and the defendant or officer can communicate, as well as view each other's image.

Advantages to using video hearings are:

- the judge and court personnel do not have to travel to the jail facility nor prisoners travel to the court facility;
- reduced security risks;
- a record of the hearing preserved on video; and
- time saved.

Other uses of videos in courts across the country include videoconferencing in court proceedings, desktop videoconferencing in judicial deliberation at the appellate level, remote witness testimony, making the court record, videotaped jury instructions, and videotaped demonstrative evidence.

4. Fax and Electronic Filings*

Fax machines permit a duplicate of a document to be transmitted to another fax machine via a regular telephone line. Today, faxes are used for court filings and have replaced overnight delivery services because they are faster and less expensive. The court must establish a means for obtaining original signatures and payments when they accept fax filings.

If original signatures are required, the sending party may simply keep the copy with the original signature and make it available to the court or other parties on request. Sec. 51.806, G.C.

Electronic filing is the transmission of a document text from one computer to another via the internet or a kiosk. Typically, this can occur only after a format is established by the court and access to the court's computer is authorized. Electronic filing is now being used in some large volume courts. It greatly reduces the volume of paper handled, delays caused by document loss or mishandling, storage needs for court files, and data entry errors. Signature verification or some other form of authentication is essential with electronic filing. Currently, police departments may electronically file collision reports with DPS. Police can also forward an arrest warrant or probable cause affidavit by secure facsimile or other secure electronic device. Art. 15.08, C.C.P.

In 2011, the Legislature authorized the use of email for the application of an emergency detention when the applicant is a physician. The magistrate or judge may also transmit a warrant electronically or by email to a physician applicant. Sec. 573.012, H.S.C. Clearly, courts are coming into the digital age.

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* Electronic research note: to search for statutes, opinions of court rules involving faxes, search on the term "facsimile" in addition to searching on "fax."

5. Imaging Systems

In imaging systems, a document is scanned and converted into a digitized format that can be read by computers and electronically stored and retrieved. Data attached to each image enables the computer to link it to a specific case, individual, or other documents. The stored image is a duplication of the original. The image can be written into the storage device only once, but it can be read many times without making any alterations.

Article 45.012(a) of the Code of Criminal Procedure provides that a document that is issued or maintained by a justice or municipal court or a notice or a citation issued by a law enforcement officer may be created by electronic means, including optical imaging, optical disk, digital imaging, or other electronic reproduction technique that does not permit changes, additions, or deletions to the originally created document. Imaging systems allow the court to copy files into an electronic medium for storage, freeing up office space occupied by ever increasing paper files. Forty thousand pages of documents can be stored on a single disk, largely reducing paper and storage costs. Many software programs allow the user to search a key word or phrase, saving considerable time in searching through multiple documents. Documents can also be transmitted electronically between the clerk's office and the judge's bench. A judge, for example, may quickly retrieve a previous court order or motion. Additionally, documents can be transferred over the internet to remote sites, such as the jail facility, a court satellite office, or even to the home of an employee who is telecommuting. If a public access terminal is integrated into the system, individuals who need a copy of a court document can view it and print it on a printer. Corpus Christi, Dallas, San Angelo, and Houston are just a few of the many municipal courts that have customized an imaging system, moving those courts towards paperless. For additional information on imaging systems, search *Document Management* at www.ncsc.org.

6. Case Management Software

A case management system consists of one or more software applications that allow the court to manage the information associated with individual cases and overall court activities. With it, a case can be tracked throughout the judicial process until its final disposition, and imaged exhibits and documents can be electronically captured and stored as part of the case record to be retrieved as the judge or clerk needs them.

Article 45.017(b) of the Code of Criminal Procedure expressly authorizes a court to keep an electronic docket. Furthermore, Article 45.012 of the Code of Criminal Procedure discusses the use of electronically created records and authorizes a court to use electronic means to (1) produce a document required by law to be written; (2) record an instrument, paper, or notice that is permitted or required by law to be recorded or filed; or (3) maintain a docket. Art. 45.012(b), C.C.P. An electronically recorded judgment has the same force and effect as a written signed judgment. Art. 45.012(d), C.C.P. A statutory requirement that a document contain the signature of any person, including a judge, clerk of the court, or defendant, is satisfied if the document contains that signature as captured on an electronic device. Art. 45.012(h), C.C.P.

The first case management systems were developed by computer consultants for large or mid-size cities, but now are widely used by all sizes of courts. Prices vary according to the number of functions the system provides, the caseload, the number of workstations required, the type of hardware selected, networking requirements, and other factors. In deciding whether to purchase a package system or a customer-developed system, consider the type and quality of technical support, future enhancements, and the company and court's respective roles in software

development. A system should be purchased only from a reputable company that can provide a list of references. Ownership of the copyright and system design should be clarified. The proposal should call for annual updates and revisions, especially after each legislative session.

a. Companies Offering Case Management Software

Currently, there are a number of software applications for docket management.

To find a court management software that best suits your courts' needs, contact court clerks and administrators in your area. The Texas Court Clerks Association is also a good source for information on software systems. Also, the Court Administrators listserv is a helpful resource for feedback on different applications.

b. Recommended Capabilities of Case Management Software

Recommended capabilities that a case management software should contain include:

- Menu-driven software enabling the user to easily learn and operate the system.
- User-defined fields to establish codes for complaint wording for offenses. This information should automatically be entered and printed on a complaint form.
- The ability to monitor a case as it moves through the judicial system, automatically flagging the case for warrants when the defendant fails to appear. The system should be able to print warrants and report delinquent cases and allow updates to warrant status. It should monitor and track appeals.
- The ability to monitor and track bond forfeiture cases, including judgment nisi, scire facias dockets, citations, trials schedules, and final judgments.
- The ability to enter report convictions even when the fine/costs have not been fully paid.
- If the court contracts with a private vendor to collect delinquent accounts, the ability to send and receive reports to and from the vendor on a daily basis.
- Financial management capabilities that will produce financial reports; record receipts, tabulate and track records, payments, installments, and court costs, fees, bond amounts; track bonds that are refunded or forfeited; and print a bill of costs (a receipt showing the defendant an itemized list of all court costs/fees the defendant is ordered to pay).
- Archiving, indexing, and cross-referencing functions to access and retrieve records on microfiche, imaging, or paper.
- The ability to generate daily, weekly, and monthly reports of cases filed, cases disposed of, warrants issued, or any other transactions that occur daily, weekly, or monthly. The system should be able to generate state reports and statistical information needed in preparing budgets, notices of final conviction and out-of-state violator reports to DPS, quarterly court costs reports to the Comptroller, and monthly reports to the OCA.
- The ability to generate forms such as complaints, dockets, subpoenas, courtesy letters, summons, warrants, capiases, capias pro fines, jury notices, parent notices, driving safety courses notices, and other user-defined forms.

- A master maintenance file with offense code listings, disposition code listings, officer listings, fines/court costs/fees, and other user-defined listings for updating and making changes mandated by the Legislature and case law.
- A file backup, password maintenance, and printer settings.
- A programmer's manual and user's manual that include the system specifications, program index, installation guide, and user instructions for the program.

Q. 21. List three benefits of automating your court. _____

_____

_____

_____

True or False

Q. 22. Texas law does not allow video magistration or commitment hearings because the judge or magistrate does not see the accused face to face in prison. ____

Q. 23. Explain the advantages of an electronic broadcast video hearing system. _____

_____

_____

True or False

Q. 24. Texas law does not allow for fax or electronic filings. ____

Q. 25. Explain how an imaging system may some day produce a paperless court. _____

_____

Q. 26. What statute authorizes the court to use electronically created records, signatures, and dockets? _____

Q. 27. Give three examples of financial management capabilities that a court software program should offer. _____

_____

_____

PART 5
METHODS TO ASSIST IN FINE COLLECTION

A. Photo Imaging

The Midland Municipal Court uses a Photo Imaging System when defendants are unable to immediately pay their fines or costs. After the judge assesses the individual's ability to pay and approves a payment plan, the defendant is digitally photographed and given payment coupons. If the defendant fails to make payments on his or her account, the defendant's picture is printed on the capias pro fine to assist peace officers executing the writ. Clerks also have the ability to

access the photo when the defendant appears back in court. Not only does this help identify the defendant, but there appears to be a psychological effect from photographing the defendant that encourages voluntary compliance. Many electronic ticket writers also give officers the ability to capture the defendant's photograph.

B. Payment by Credit Card by Telephone or Internet

Many Texas cities have formed a partnership with private companies to establish a credit card payment system. The fully automated system enables citizens to pay fine and costs for citations with a credit card over the telephone. The service verifies that the credit card is legitimate and that sufficient funds exist to pay the fine. There is no charge to the court for this system though the citizen pays a convenience fee that covers the credit card discount rate, all associated banking fees, and all 800-telephone line charges. Operator intervention is not required. To find a vendor that best suits your court's needs, contact court clerks and administrators in your area or join the Court Administrators listserv to ask clerks across the State.

In 2001, the Legislature amended Chapter 132 of the Local Government Code by adding Section 132.007, which allows a city to provide access to information or collect payments for taxes, fines, fees, court costs, or other charges through the internet. A fee to recover costs for providing access may be charged only if providing the access through the internet would not be feasible without the imposition of the charge. The amendment also provides authority to contract with a vendor to provide the service. The city or county must approve any fee charged by the vendor. Payments collected by the vendor are to be promptly submitted to the city or county.

Section 132.002 of the Local Government Code was also amended to provide the governing body of a municipality with the authority to accept payment by credit card without requiring collection of a fee.

C. Kiosks

The City of San Antonio has developed a successful kiosk system. Similar to an ATM machine in appearance and use, kiosks use computer software and multimedia technology to illustrate user-friendly graphics, video, and/or animation. They are typically located in easy access public areas, such as public libraries and shopping malls, or public areas at the courthouse. Kiosks provide information about specific cases, courtroom assignments, court hours, and court procedures. They also allow users to get copies of documents stored in a court's imaging system.

Q. 28. Explain the use of photo imaging in fine collection. _____

_____

True or False

Q. 29. Courts may not collect payments by credit card. ____

Q. 30. Courts may collect fines and fees over the internet. ____

PART 6
TECHNOLOGY FOR PUBLIC INFORMATION ABOUT THE LAW

How much time do you and your staff spend on the telephone repeating information to the public? Do you worry that your telephone operator or one of your deputy court clerks is

providing legal advice? Do you need a way to communicate a large amount of organized, indexed information, 24 hours a day, seven days a week that is instantly accessible without human intervention as needed in many courts?

Electronic public access can encompass a variety of technologies, including websites, and voice-response systems. These may be operated entirely by the court or may involve a third-party service provider.

A. Court Website

1. Information to Include

Developing a website for your court offers an excellent opportunity to expand access to information about your court and provide information about the law. Many topics may be included on your website and a web map, such as the following, may help you plan. These are all just suggestions; this is not an exclusive or exhaustive list.

Court Home Page

- Identify the court
- Site map or outline
- Link to city's home page
- Link to the city's code of ordinances
- Link to community resources
- Links to state and national law-related information
- What's new
- Mission statement of the court
- Jurisdiction of the court
- Explanation of the independence of the judiciary
- Contact information for judge(s) and clerks
- Hours/location (including a map and directions for visiting the court)
- Search function
- Date site was last updated

For the Public

- Employment opportunities
- Selection process for municipal judges
- Judicial Code of Ethics
- Links to the State Commission on Judicial Conduct and State Bar of Texas for grievances against the judge or attorneys
- How to request records from the court

For the Defendant

- Fine and court costs schedule (e.g., window fines or common fine amounts)
- Defendants' rights
- Court procedures
- Legal terminology
- Local rules on conduct and attire
- Special procedures for juveniles and parents

- Teen court (if the court uses this option)
- Tips for pro se defendants
- How to contact an attorney
- Consequences of failure to appear
- Options for making a pleas and appearance
- How to show proof for compliance dismissals or insurance cases
- Requesting a driving safety or motorcycle operators course
- Policies on installment plans
- Available alcohol or tobacco awareness courses
- Community service options
- Appeal rights
- FAQs

For Jurors

- Importance of service
- Juror pay (if applicable)
- What to expect
- Contempt for failure to respond to a summons
- Jurors' rights
- Juror qualifications and exemptions
- Location and parking
- Updates on appearance status

For Victims

- Victims' Bill of Rights
- Information on the Crime Victims' Compensation Fund
- Domestic violence resources

For Others

- Location of access for persons with disabilities
- Policy on interpreters
- Information for attorneys
- Information for court reporters
- Volunteer opportunities
- Customer service surveys

2. Exemplary Sites

Some exemplary websites based on their layout, topics included, or links include:

- Houston: www.houstontx.gov/courts
- Austin: www.austintexas.gov/department/municipal-court

It is a good idea to do a web search (using Google or Yahoo) for Texas municipal courts. So many courts have websites and the best way to design yours is to see what works for other cities.

3. Website Development and Design

Websites should reflect the spirit of the organization. Issues involved in maintaining the dignity of the court should be carefully examined. While website developers recommend "fish food" (new postings, interesting articles) to lure visitors to the site and to encourage revisits, it is important not to overload the public with information on your website. Overloading your site with information from a variety of sources can confuse citizens and leave them unable to digest the information they actually need. You do not want your important court messages getting lost in a sea of text.

In recent years, website development has become simpler with templates provided. Small courts may be able to develop and maintain websites with essential information with a minimal amount of training.

The public's impression of the dignity of the court and its proceedings must not be jeopardized. The canons of the Code of Judicial Conduct would apply to items placed on a website by a judge or a person working under his or her authority. The staff attorneys at the Commission on Judicial Conduct welcome discussions on any possible improper or controversial items. The Commission's number is 512.463.5533. Clearly, a balanced approach is essential to preserve the dignity and image of the court. If an e-mail function is built into the site, it should contain measures to protect the judge from ex parte communication.

The Judicial Committee on Information Technology (JCIT) Judicial Standards for Website Presentation and Content should be reviewed prior to finalizing a website design. The standards can be accessed from JCIT's website at: www.courts.state.tx.us/jcit.

B. Voice Responder Systems

Interactive Voice Responder Systems allow the public to obtain information about their case status by dialing a local telephone number. This enables a caller with a touch tone telephone to access specific information and allows the court to handle routine inquiries. The caller initially connects to an automated voice attendant that directs the caller to make selections on the telephone touch pad.

Short, easily remembered information, such as court dates, locations, hours of operation, bond amounts, fine amounts, DSC due dates, and information on jury summons are easily accessed through voice-responder systems. Information may be available in Spanish and English.

A system may simply be an answering machine with mailbox recordings or it may include fine payment by credit card. To locate vendors, contact a vendor listed on the website for either the National Center for State Courts or the Department of Information Resources of the State of Texas or other clerks in the State.

- www.ncsc.org
- www.dir.state.tx.us

Some software providers have taken this concept further and can actually place calls to defendants automatically. For example, the system may place automated calls to all defendants who failed to appear for a docket or have a warrant issued for them in the evening hours as a courtesy.

Q. 31. Which of the following would you view as appropriate for a court's home page?

a. Lottery results.
b. Cheapest car insurance rate in the State.
c. FBI website: www.fbi.gov.
d. Information about the local humane society.
e. Tips to parents for recognizing signs of gang alliance in their children.
f. How to recognize signs of domestic violence syndrome.
g. List of local battered women's shelters.
h. Advertising permitted by only one local bail/bondsman.

True or False

Q. 32. The canons of the Code of Judicial Conduct would apply to items placed on a website by a judge or person working under his or her authority. ____

Q. 33. Outline both court and public information that might be included on a court's website.

_____

_____

PART 7
FINANCIAL, LEGAL, AND ETHICAL CONSIDERATIONS

A. Legal Issues

Attorney General Letter Opinion No. 97-082 (1997) stated that "a computer system may be used to prepare affidavits and arrest warrants and to transfer them among the public officers and employees who have responsibilities connected with these documents. A judge may 'sign' an arrest warrant by personally entering a computer graphic of his or her signature on the warrant in the computer system. A magistrate may issue a warrant based upon a computer facsimile of an affiant's signature, assuming that the affiant orally swears to the truth of the affidavit and signs it in the magistrate's presence."

The leading case discussing the use of signature stamps could also relate to the use of electronic signatures. In *Daniels v. Stovall*, 660 F. Supp. 301 (S.D. Tex. 1987), a justice of the peace delegated his authority to affix his rubber signature stamp to a mental health warrant outside his presence. He reviewed the warrant and adopted it the next business day. The court cited favorably Attorney General Opinion No. JM-373 (1985), which stated that a judge may not delegate authority to affix his or her signature unless the signature is affixed under the judge's personal supervision. By extension, the opinion is cited for the proposition that a judge may "sign" a document by allowing another to place a mark on a document that constitutes the judge's approval of a document only if the other person does so in the presence and under the direction of the judge. Although the opinion answered the question as to whether a clerk could affix a judge's signature stamp to a document, the same rationale could be applied in regards to manipulating the court software to affix the judge's signature to the judgment, warrant, etc.

B. Financial Assistance

Three statutes provide assistance for courts to acquire or upgrade technology.

- Article 102.0172 of the Code of Criminal Procedure provides authority for a governing body of a municipality to establish by ordinance a technology fund fee in an amount not to exceed $4.00 to be collected upon conviction. In 2003, the Legislature amended the statute to allow the fund to be used not only to finance the purchase of technological enhancements for the municipal court, but also for its maintenance. Examples of technological equipment include, but are not limited to: computer systems, networks, hardware, and software; imaging systems; electronic kiosks and ticket writers; and docket management systems. For more on this fund, see Part 10 of this study guide.
- Section 133.103 of the Local Government Code provides for a $25.00 time payment fee to be paid by defendants who pay any part of a fine, court costs, or restitution on or after the 31st day after the date on which a judgment is entered. The city retains 50 percent of this fee, or $12.50; $2.50 of this amount is to be used to improve judicial efficiency, which could include technology.
- Section 133.105 of the Local Government Code allows the city to keep 60 cents of the $6.00 judicial support fee to promote the efficient operation of the municipal court and the investigation, prosecution, and enforcement of offenses in its jurisdiction. Again, technology could contribute to court efficiency.

C. Ethical Issues

While the use of technology has brought many efficiencies and conveniences to municipal court operations, it has also brought mischief and peril. Courts will and should continue to have conversations about effective uses of technology and social media, as the utility and prevalence will only continue to increase.

1. Social Media Use

The participation in social media has exploded to such proportions that if Facebook was a country, it would be the fourth most populous country in the world. The number of active Facebook users has grown from 250 million in July of 2009 to 1.1 billion users in March of 2013. Twitter, the online social networking and microblog site, was launched only in 2006 and has at least 500 million active users worldwide. There are many other sites (FourSquare, Instagram, LinkedIn, etc.), though Facebook is certainly the most prolific. What does that mean in our courts?

Municipal court personnel are held to the same standards as judges pursuant to the Code of Judicial Conduct. Thus, clerks need to be aware of their online activities and how it could reflect on their position and the court. Be aware that Facebook postings can become public. Becoming "friends" with defense attorneys, police officers, or the prosecutor, for example, could give the appearance of partiality or bias towards certain parties. Use of social networking sites during work hours by employees has become an area of concern to employers. Each court should address the use of the internet, social networking, and email in its policies and procedures manual. For updated information about the use of social media and the court, visit the TMCEC website at www.tmcec.com/Resources/News/Technology_and_Ethics. Keep in mind that Texas is an "at-will" employment state, meaning the employer is free to discharge individuals for good,

bad, or no cause. According to opinions and memorandums posted by the National Labor Relations Board, the following posts are not protected under Section 7 of the National Labor Relations Act:

- personal venting or rants;
- disclosure of confidential information or trade secrets; and
- harassing, violent, abusive, or malicious statements.

Court personnel must be aware of the problems that can arise from the use of social media sites, but should also explore and be open to the advantages of this technology. Many courts have Facebook accounts, which can be more easily and readily updated than a website, to post updates and educational outreach information. TMCEC uses its Facebook and Twitter sites to keep those interested in municipal courts up to date on the latest news.

While this is a useful and cost-effective way to keep in touch with the public, there are advantages and disadvantages to the practice. The Center for Technology in Government conducted an exploratory study regarding this issue and proctored a round-table discussion with IT professionals working in the government sector. The following list of advantages and disadvantages to using social media sites in the court setting was discussed.

Advantages of a Court Social Media Site:

- Greater competitiveness in employee recruiting;
- Enhanced access for the disabled;
- Creation of virtual communities;
- Instantaneous information sharing;
- Information dissemination and exchange, such as improving public awareness of government services;
- Enhanced collaboration between agencies;
- Enhanced public safety by allowing increased dissemination of agency information in a time of emergency;
- Coolness factor;
- Providing consistent information that is automatically logged and documented; and
- Cost saving for courts, cities, and citizens.

Disadvantages of a Court Social Media Site:

- Lack of resources for:
  - bandwidth needed to support streaming videos and higher online traffic
  - labor and personnel needs for maintaining social media sites; and
  - additional training costs;
- Legal and regulatory ramifications for information that is not properly monitored, checked for accuracy, and that does not adhere to existing federal and state laws;
- Governance (who can post on courts' behalf, leakage of sensitive information, and perceived endorsements or advertisements);
- Showing preference for one site over another;

- Security of confidential data, court infrastructure, and security of citizens;
- Accessibility and the issue of placing too much reliance on the internet further perpetuates the disadvantages of those who do not have access to the internet;
- Perception of social media being too cool or fun for government purposes; and
- Information overload.

Courts will and should continue conversations about effective uses of technology and social media as the utility and prevalence will only continue to increase.

2. E-Mail Use

Now that technology is prevalent in most aspects of court management, the court should adopt policies regarding the use of email and the internet. The Judicial Committee on Information Technology (JCIT) has provided guidelines for e-mail use. The following are excerpts from their guidelines.

1. Purpose:

This policy provides guidelines for the use of agency electronic mail (email). It applies to both internal email and external email sent or received via the internet. These guidelines do not supersede any state or federal laws, nor any other agency policies regarding confidentiality, information dissemination, or standards or conduct.

2. Guidelines:

a. Business Use.

The agency email system is state property (in the case of the municipal court, it is the city's property). Use of the email system, except in the limited circumstances listed below, is for official state business only.

b. Confidentiality.

Employees should have no expectation of privacy regarding their use of the e-mail system and e-mail content. All email is subject to inspection and audit by agency management or its representatives at any time, with or without notice. Use of the agency's email system by an employee indicates that the employee understands that the agency has a right to inspect and audit all email communications and consents to any inspections.

c. Personal Use.

Generally, email should be used only for official state business; however, brief and occasional email messages of a personal nature may be sent and received. Personal email should not impede the conduct of state business; only incidental amounts of employee time, time periods comparable to reasonable coffee breaks during the day, should be used to attend to personal matters. Personal email should not cause the state to incur a direct cost in addition to the general overhead of email. Consequently,

employees, upon receiving personal email, should read it and delete it. Employees shall not store or print their personal email.

d. Restrictions

1. Racist, sexist, threatening, or otherwise objectionable language is strictly prohibited.
2. Email should not be used for personal monetary interest or gain.
3. Email should not be used for any political purposes.
4. Email should not subscribe to mailing lists or mail services strictly for personal use.

The JCIT commentary following the policies discusses the ethical considerations in using email.

> Canon 3(B)(6) of the *Code of Judicial Conduct* prohibits the judge from knowingly permitting staff, court officials, and others to manifest bias or prejudice by conduct or words. Using email to spread racist or sexist jokes or to talk about defendants in a derogatory or objectionable manner violates Canon 3(B)(6). Email is public.
>
> This type of communication also violates Canon 2(A), which provides that the judge should act at all times in a manner that promotes public confidence in the integrity and impartiality of the judiciary. Clerks must always consider that they are in a position of public trust and that their conduct including what they put in writing must always follow the ethical principles in the *Code of Judicial Conduct*.
>
> Canon 5 provides that the judge must refrain from inappropriate political activity. This rule includes the use of court computers' email. Any suggestion in an email that a court employee or the judge endorses a candidate or makes derogatory remarks about a candidate is a violation of Canon 5.

3. Internet Use

The JCIT has also provided guidelines for internet use by employees. The following are excerpts from their guidelines.

1. Purpose:

This policy provides guidelines for the use of the internet. It does not supersede or limit any state or federal laws, nor any other agency policies regarding confidentiality, information dissemination, or standards of conduct.

2. Guidelines:

a. Business Use.

The agency internet system is state property (in the case of the municipal court, it is city property). Access to the internet, except in the limited circumstances listed below, is allowed for official state business use only.

b. Confidentiality.

Employees should have no expectation of privacy regarding their use of the internet. All records created by internet use, including path records, are subject to inspection and audit by agency management or its

representatives at any time, with or without notice. Use of the agency internet system by an employee indicates that the employee understands that the agency has a right to inspect and audit all internet use.

c. Personal Use.

Generally, the internet should be used only for official state business; however, brief and occasional surfing or browsing for personal reasons is acceptable.

Personal use of the internet should not impede the conduct of state business; only incidental amounts of employee time, time periods comparable to reasonable coffee breaks during the day, should be used to attend to personal matters. Personal use of the internet should not cause the state to incur a direct cost in addition to the general overhead of the internet system. Consequently, employees should not store or print personal Internet material.

d. Restrictions.

1. Accessing, posting, or sharing any racist, sexist, threatening, obscene, or otherwise objectionable material (visual, textual, or auditory) is strictly prohibited.
2. The internet should not be used for any personal monetary interests or gain.
3. The internet should not be used for political purposes.
4. Employees should not subscribe to mailing lists or mail services strictly for personal use and should not participate in electronic discussion groups (list server, news groups, chat rooms) for personal purposes.

e. Employees must not intentionally use the Internet facilities to disable, impair, or overload the performance of any computer system or network, or to circumvent any system intended to protect the privacy or security of another user.

The JCIT commentary again discusses the ethical concerns about employees internet usage. The commentary reads:

> The canons discussed in the email commentary above apply to general internet use as well.
>
> Additionally, Canon 3(B)(2) of the *Code of Judicial Conduct* requires judges to be faithful to the law and to maintain professional competence in it. Hence, courts that have websites must be careful to not give legal advice and to make sure that any information regarding court procedures provided on the website is legally correct.

True or False

Q. 34. The Attorney General has opined that computerized signatures are permissible on affidavits for arrest warrants as long as the affiant swears to the truth of the affidavit and signs it in

the presence of the person administering the oath. ____

Q. 35. A clerk should only affix a judge's signature stamp or cause the judge's electronic signature to be placed on a document if it is done at the judge's direction and in the judge's presence. ____

Q. 36. Courts can rely on the technology fee, a portion of the time payment fee, or the city's portion of the judicial support fee to finance technology purchases. ____

Q. 37. Technology can increase court efficiency. ____

Q. 38. It is okay for clerks to email derogatory or sexist jokes to a friend using the court's computer since the public will not see the joke. ____

Q. 39. The court's email is confidential. ____

Q. 40. Clerks can use the court's email to support a candidate for mayor. ____

Q. 41. Accessing a racist internet site on a court computer violates the *Code of Judicial Conduct*. ____

Q. 42. A court's website can advertise for the incumbent mayoral candidate. ____

Q. 43. Name three advantages and three disadvantages to using social media in the court setting.

_____

_____

_____

_____

_____

_____

PART 8
COMPUTER CARE

Computers are built out of hundreds of thousands of microscopic electrical circuits etched on a little sliver of silicon. Working together, these circuits open and close millions of times per second. The following factors are important for maintenance of the computer.

A. Electricity

A steady flow of electrical power is required for the computer to run. A surge protector protects the machine from electrical spikes and surges that can severely damage the hardware and/or cause data loss. The three most common causes of surges and spikes are lightning, fluctuation in power from the electric company, and fluctuation in power from the use of other appliances. Depending on the size of the system, a battery powered back-up system may be beneficial. A grounded electrical outlet is definitely required for a surge protector to function. If the court does not have a grounded outlet, one must be installed by an electrician. A backup power supply is important if power goes out. Be sure to have batteries available to backup data.

B. Magnetism

Magnets can affect both hardware and software. Even the small, decorative kitchen magnets can erase a disk.

C. Temperature

Heat can damage microcircuits. It is important to make certain that the fan in the computer is functioning and that the vent is unobstructed. A computer should not be placed in direct sunlight or in a hot room.

D. Stability

A computer should be placed on a table where it will not be jarred and it should never be moved while it is running. Vibrations should be avoided.

E. Dust, Dirt, and Smoke

Smoking while sitting at the computer should be prohibited. A small vacuum should be purchased to clean the keyboard and printers regularly. Compressed air should be used to flush out dust from fans and vents.

F. Liquids

Liquids can short-circuit electronic equipment. Beverage cups and potted plants should be kept away from the computer.

G. Monitors and Printers

These should be turned off when not in use.

H. Viruses

Every two to three weeks or more often, an antivirus protection program or utility software should be used to detect viruses. Only software that is certified virus free and data that is not downloaded from outside sources should be accepted, unless first checked for viruses. A note of caution: It is very important to scan all files that are downloaded from the internet for viruses. Months or years' worth of data can be irretrievably lost through infections caused by a computer virus.

True or False

Q. 44. Heat, sunlight, magnets, and liquids can damage computers. ____

Q. 45. Placement of a computer is not important. _____

Q. 46. A virus protection program or utility software should be used frequently to detect viruses. ____

PART 9
ERGONOMICS AT THE KEYBOARD

Computers allow employees to perform many tasks faster and more efficiently than ever before. There are, however, health hazards associated with extended computer use. These hazards may include headaches and backaches, vision damage, and other more serious injuries. Ergonomics, the study of the way the body moves and works most efficiently and safely, provides helpful suggestions to avoid these hazards. Every computer user should apply the principles of ergonomics to his or her work environment to avoid computer use related injuries.

A. Neck and Back

It is important to understand the ergonomic features and adjustments of your equipment to set up your work environment properly. Proper positioning of equipment combined with frequent breaks can reduce the pain and loss of productivity associated with spinal and muscular injuries.

- To lessen strain on neck muscles, the computer screen should be kept no higher than eye level. A document holder kept at the same height as the screen will lessen strain. Avoid moving head from side to side or up and down, as this movement can cause neck and back spasms.
- Adjust the chair so that eyes and hands are at the proper height for optimum comfort and safety. If necessary, a footrest allows the feet to touch flat while maintaining a 90 degree angle between the thighs and lower legs. The chair should not put pressure on the upper legs.
- Adjust the lumbar (lower back) support of the chair so that the part that curves outward (towards the front of the chair) corresponds to the part of the lower back that curves inward.
- Balancing the telephone receiver between the head and shoulder can lead to long-term neck problems. A headset or speaker phone can help avoid this.
- Equipment used most often should be within easy reach from the chair (about 16 inches).
- Taking a few deep breaths can help to relax and focus.
- Shifting positions occasionally will help relieve stress to the muscles and joints.
- Short breaks can be very energizing. Neck stretches and shoulder shrugs can help relieve tension. For most people, stretches that bring the shoulder blades together while clasping the hands behind the head and pulling the elbows back, for example, can provide significant tension relief.

B. Eye Protection

Glare from monitor screens can be hazardous to eyes. While effects may not be immediate, long-term focusing on a near point can have the effect of injuring the tiny muscles that help the eyes focus.

- To reduce glare, position the monitor so that neither it nor the user faces a window. If necessary, use hoods or screens.
- Dimming the lighting around the monitor also reduces glare and makes the screen easier to read. The screen's brightness and contrast should be adjusted to suit lighting conditions.
- If the screen has a choice of colors, those easiest on the eyes are preferable.
- Take frequent breaks. Just looking away from the screen once every 20 minutes helps ease eye fatigue. Cupping the eyes with palms, or rolling the eyes around a few times, also helps.

C. Preventing RMIs

Repetitive motion injuries (RMIs) result when the tendons and nerves in the hand, wrist, and arm become irritated from overuse causing numbness, tingling, or pain. Without sufficient recovery time, even activities involving very little force, such as typing on a computer keyboard, can cause an RMI. Several things can be done to reduce the risk of developing these types of injuries.

- While sitting, elbows should be slightly higher than the keyboard. This helps keep the wrists straight while typing. If the chair or the desk do not allow for an adjustment of the angle of the keyboard, using the keyboard kickstand helps maintain the neutral line of hands and wrists.
- Bending wrists up or down or side to side while typing should be avoided. In moving from the alpha part of the keyboard to the numeric keypad, the wrist should be kept straight by moving the whole hand and forearm. A wrist brace helps immobilize the wrist to prevent injury.
- A lighter touch (less force) on the keyboard is preferable.
- Resting wrists on a sharp edge while typing should be avoided. A foam wrist rest is an inexpensive and simple solution to adapt most workspaces.
- Pace yourself. Short breaks once every hour while using the keyboard are suggested. Gently stretch, rotate, and massage the hands and arms. Shorter, more frequent breaks are more effective than longer, less frequent breaks.
- If any weakness, numbness, or pain is felt in the hands or arms, a supervisor should be notified immediately. The earlier an RMI is identified, the easier it will be to prevent a serious disability.
- Use of a track ball or a touchpad keyboard helps prevent RMIs associated with extensive use of a mouse.

The time invested in preparing a safe and comfortable work space, including breaks that allow for rest and gentle stretching, is considerably less than the time lost to decreased productivity caused by physical discomfort or injury.

Q. 47. What are RMIs and how can they be prevented? _____

_____

Q. 48. What are two steps that can reduce neck strain? _____

_____

Q. 49. What are two steps that can reduce eye strain? _____

_____

PART 10
MUNICIPAL COURT TECHNOLOGY FUND

In 1999, the Legislature created the Municipal Court Technology Fund, found in Article 102.0172 of the Code of Criminal Procedure. When first enacted, the fund was only allowed to be expended on certain items; in 2003, the Legislature amended the language of the statute to expand the uses for the fund.

Article 102.0172 provides:

> (a) The governing body of a municipality by ordinance may create a municipal court technology fund and may require a defendant convicted of a misdemeanor offense in a municipal court or municipal court of record to pay a technology fee not to exceed $4 as a cost of court.
>
> (b) In this article, a person is considered convicted if:
>
> > (1) a sentence is imposed on the person;
> >
> > (2) the person is placed on community supervision, including deferred adjudication community supervision; or
> >
> > (3) the court defers final disposition of the person's case.
>
> (c) The municipal court clerk shall collect the costs and pay the funds to the municipal treasurer, or to any other official who discharges the duties commonly delegated to the municipal treasurer, for deposit in a fund to be known as the municipal court technology fund.
>
> (d) A fund designated by this article may be used only to finance the purchase of or to maintain technological enhancements for a municipal court or municipal court of record, including:
>
> > (1) computer systems;
> >
> > (2) computer networks;
> >
> > (3) computer hardware;
> >
> > (4) computer software;
> >
> > (5) imaging systems;
> >
> > (6) electronic kiosks;
> >
> > (7) electronic ticket writers; and
> >
> > (8) docket management systems.
>
> (e) The municipal court technology fund shall be administered by or under the direction of the governing body of the municipality.

The Code Construction Act, in Section 311.005(13), provides that the term "including" is a term of enlargement and not of limitation or exclusive enumeration, and that use of the term does not create a presumption that components not expressed are excluded. Thus, the fund cannot be used only for those things described in Subsections (d)(1)-(8), but rather to fund the purchase of or maintenance of technological enhancements for the municipal court. It is important for cities to remember that the fund is to benefit the court.

To collect the technology fund, the city must have passed the appropriate ordinance authorizing the collection of the fee, creating the fund, and setting the amount of the fee not to exceed $4. This fee is a local cost, of which 100 percent of the collected money stays with the city. It is collected on conviction, including deferrals, for all cases in the municipal court.

As discussed in Part 4 of this study guide, the use of electronic broadcast means to conduct magistration, probable cause determination, or commitment hearings is not only an effective use of technology, but also carries security implications. In 2011, the Legislature explicitly recognized the security benefit to using these video teleconferencing systems by adding such to the non-exhaustive list of potential uses of the Municipal Court Building Security Fund authorized in Article 102.017 of the Code of Criminal Procedure. This fund operates much like the technology fund and requires an ordinance to be collected, is collected on all convictions and deferrals in the court, and should be used to benefit the court.

Look in the TMCEC *Forms Book* online at www.tmcec.com/resources/books/forms_book/ in the Sample Ordinances chapter for a sample ordinance creating the technology fund and the security fund.

True or False

Q. 50. The municipal court technology fund may only be spent on the items enumerated in the statute. ____

Q. 51. The city must pass an ordinance before collecting the municipal court technology fee. ____

PART 11
CONCLUSION

Judges and clerks must work cooperatively to make decisions governing the use of technology in the courtroom. Management, technology, and the efficient adjudication of cases are all interrelated and careful planning is essential. Moreover, when implementing a computer system for the court, sufficient funding and time to train all employees to use this system is essential.

Other factors that must be considered when using current technology in the court include security and privacy requirements and access to information by law-related groups, news media, and the public. A national trend to provide consistent data across the criminal justice network involves integrating case management of the criminal justice system by linking to other systems, such as law enforcement, jail management, and the public defender's and prosecutor's offices.

ANSWERS TO QUESTIONS

PART 1

Q. 1. The hard drive.

Q. 2. The hard drive stores files for permanent or long-term use, and the processor reads and executes commands.

Q. 3. RAM stands for random access memory. It is a memory device in the form of a computer chip or inline memory module that stores information for processing by the computer. This high-speed memory holds a copy of the operating system, any current applications being used, and all information that is being processed while the system is in use. The file that is being modified and all changes that are made are kept in RAM until it is "saved."

Q. 4. It allows access to the national legal publishers' codebooks and case law libraries in CD format. Electronic libraries are easy to access, easy to replace, and take up less space.

Q. 5. Hardware is the actual physical equipment while software refers to the programs that are used on the computer.

Q. 6. Apps.

Q. 7. This software allows for file management, file compression, and data back up.

PART 2

Q. 8. The metaphor of a superhighway is used to represent the internet because it consists of millions of computers around the globe connected by wires, fiber optics, and satellites.

PART 3

Q. 9. One connects a home or office computer by one of the connection methods listed in the chart located in Part 1. Depending on the type of internet access available, extra equipment, such as a modem, may be needed. A web browser, such as Microsoft Internet Explorer, and an Internet Service Provider are also necessary.

Q. 10. Answers will vary. An advantage is that they have free software and technical assistance. A disadvantage is that the telephone lines used to access the internet may frequently be busy during peak hours.

Q. 11. It is a set of letters or words that represent numbers (an address) that can digitally access websites.

Q. 12. .com – company

.edu - educational institution

.org – organization

.gov - government

Q. 13. The system used to cross-link or anchor documents by highlighted words or symbols. On the web, if a word is underlined or colored differently than the surrounding text, it usually means that it has been linked to another page. To access more information about that word, click on it.

Q. 14. www.tmcec.com

Q. 15. Guidelines for cyberspace etiquette are:

- Assume publicity as email is easily forwarded.
- "Flame wars" or verbal warfare and heated messages should be avoided.
- Others' time and energy should be respected and internet use should be kept short.
- Keep in mind that things that may seem funny in person can seem rude or sarcastic in print.
- Chain letters should not be forwarded in the professional environment.
- Be careful when opening mail from unknown persons, as it may contain viruses or solicitations.

Q. 16. A search engine works by sending out a spider to locate all the documents on the web and indexes those websites for easy, quick access for users.

Q. 17. www.(courtname).ci.(cityname).tx.us

Q. 18. True.

Q. 19. A software product or piece of hardware that prevents unauthorized access to a networked computer via an outside connection.

Q. 20. A process of encoding information so that it remains confidential from all when sent on the internet except to the intended recipient.

PART 4

Q. 21. The benefits of automating your court are:

- Reduction of repetitive tasks;
- Enhancement of data quality;
- Increased information accessibility;
- Increased organizational integration;
- Enhanced statistics and monitoring;
- Increased effectiveness; and
- Electronic reporting.

Q. 22. False.

Q. 23. Advantages include:

- The judge and court personnel would not have to travel to the jail facility nor prisoners travel to the court facility;
- Reduced security risks;
- A record of the hearing preserved on video; and
- Time saved.

Q. 24. False.

Q. 25. Through imaging, all court paper documents are digitized and the images stored on a disk, CD-ROM, or the hard drive. These exact reproductions are retrieved whenever

the case is processed or heard. The documents move electronically from court to clerk to prosecutor and finally, to storage.

Q. 26. Articles 45.012 and 45.017 of the Code of Criminal Procedure.

Q. 27. Answers will vary but may include the ability to generate financial reports, record receipts, tabulate and track fine payments and court costs, post payments and fines to the general ledger, and track bond payments, refunds, and forfeitures.

PART 5

Q. 28. The court staff or officer takes a digital photograph of the defendant that is attached to the file in case he or she later defaults on a payment. The file and photograph can be sent with a capias pro fine to the warrant division for service.

Q. 29. False.

Q. 30. True.

PART 6

Q. 31. Answers will vary. See the list in Part 6(A)(1): Information to Include.

Q. 32.
a. No.
b. No.
c. Probably.
d. Probably.
e. Yes.
f. Yes.
g. Yes.
h. No.

Q. 33. True.

PART 7

Q. 34. True.

Q. 35. True.

Q. 36. True.

Q. 37. True.

Q. 38. False.

Q. 39. False.

Q. 40. False.

Q. 41. True.

Q. 42. False.

Q. 43. Advantages include:

- Greater competitiveness in employee recruiting;
- Enhanced access for the disabled;
- Creation of virtual communities;
- Instantaneous information sharing;
- Information dissemination and exchange, such as improving public awareness of government services;
- Enhanced collaboration between agencies;
- Enhanced public safety by allowing increased dissemination of agency information in a time of emergency;
- Coolness factor;
- Providing consistent information that is automatically logged and documented; and
- Cost saving for courts, cities, and citizens.

Disadvantages include:

- Lack of resources for:
  - bandwidth needed to support streaming videos and higher online traffic
  - labor and personnel needs for maintaining social media sites; and
  - additional training costs;
- Legal and regulatory ramifications for information that is not properly monitored, checked for accuracy, and that does not adhere to existing federal and state laws;
- Governance (who can post on courts' behalf, leakage of sensitive information, and perceived endorsements or advertisements);
- Showing preference for one site over another;
- Security of confidential data, court infrastructure, and security of citizens;
- Accessibility and the issue of placing too much reliance on the internet further perpetuates the disadvantages of those who do not have access to the internet;
- Perception of social media being too cool or fun for government purposes; and
- Information overload.

PART 8

Q. 44. True.

Q. 45. False.

Q. 46. True.

PART 9

Q. 47. Repetitive motion injuries occur when the tendons and nerves in the hand, wrist, and arm become irritated from overuse causing numbness, tingling, or pain. These injuries can be prevented in several ways:

- keep the elbows slightly higher than the keyboard while typing;
- avoid bending the wrists up or down or side to side while typing;
- be aware of how much force is used on the keys;
- avoid resting your wrists on sharp edges while typing;
- pace yourself;
- identify immediately any weakness, numbness, or pain that is felt in the hands or arms and notify a supervisor; and
- use a track ball or keyboard instead of a mouse.

Q. 48. Keep the screen no higher than eye level and avoid moving the head from side to side or looking down.

Q. 49. Minimize the glare from the monitor screen and take frequent breaks to reduce fatigue.

PART 10

Q. 50. False.

Q. 51. True.